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EXAMINER

BAUM, RONALD

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,502

Applicant(s)

RUTHERGLEN ET AL.

Examiner

Ronald Baum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-38 are pending for examination.
2. Claims 1-38 are rejected.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows.

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 29,30-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 29,30 (and 31-38 by dependency), recite a "system" comprising a "client *that executes* a ... application having a series of instructions...". This appears to be software claim language that is non-statutory per se. Also, the claim language does not explicitly specify a software (i.e., the software embodiment of a function, method, etc.,) or hardware system. The examiner assumes for the sake of applying art that the claim refers to embodied software. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Narayan, U.S. Patent Application Publication 2002/0065946 A1.

4. As per claim 1; "An apparatus for accessing data from a database through a security mechanism [Abstract, figures 1,10,13 and associated descriptions], the apparatus comprising: a first application capable of being executed on a client computer [paragraphs 0006, 0020-0021, 0041-0647, whereas the object to object communications/method cross invocation is the application to application methodology of the client/server configuration.]; one or more proxy objects being generated in response to commands from the first application, the proxy objects requesting data from a database [paragraphs 0006, 0020-0021, 0041-0647, whereas the proxification of objects generalizes (i.e., add another layer of abstraction) object to object communications/method cross invocation in the applications of which database access (i.e., the software purchase/bank verification via credit card database searching, etc.) of the client/server configuration is clearly taught.]; one or more drivers capable of being stored on a server computer [paragraphs 0006, 0020-0021, 0041-0647, whereas the invocation in the applications of which database access of the client/server configuration examples across the Internet would clearly inherently involve the use of driver based database access (i.e., the JAVA infrastructure will inherently use J2EE aspects inclusive of JDBC drivers and support WEB based services and functions).]; and a second application capable of being executed on a server computer separated from the first application by a security mechanism [paragraphs 0006, 0020-0021, 0041-0647, whereas the invocation in the applications of which database access of the client/server configuration examples across the Internet (i.e., the server side aspect particularly) in using firewalls to protect corporate networks/sub-networks (i.e., the boundary of trust aspect) would

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clearly teach the use of a “security mechanism”], the; second application receiving the proxy objects from the first application, generating a database query based on the proxy objects and the drivers and returning the database query results to the first application [paragraphs 0006, 0020-0021, 0041-0647, whereas the invocation in the applications of which database access of the client/server configuration examples across the Internet would clearly inherently involve the use “generating a database query” for the object to object database access.].”;

Further, as per claim 11; “A method [This claim is the method claim for the system (apparatus) claim 1 above, and is rejected for the same reasons provided for the claim 1 rejection] for accessing data located behind a security mechanism, comprising: executing a first application on a client computer that generates one or more proxy objects; communicating the proxy objects to a second application on an application server; generating one or more database requests at the application server based on the proxy objects, the database requests being generating using database drivers; forwarding the database requests to a database; returning the data from the database to the application server; and providing the data back to the client computer using the proxy objects.”;

Further, as per claim 20; “A system [This claim is the system mean plus function claim for the system (apparatus) claim 1 above, and is rejected for the same reasons provided for the claim 1 rejection] for accessing; data located behind a security mechanism, comprising: a client having means for generating one or more database proxy objects in response to a database request; an application server comprising means for processing the received database proxy objects and means for using one or more: drivers to generate one or more database requests based on the database proxy objects; and wherein the client interacts with the database through

the application server so that a security mechanism protecting the client does not interrupt the accessing of the data in the database.”.

5. Claim 2 *additionally recites* the limitation that; “The apparatus of Claim 1, wherein the first and second applications are Java language applications. The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing being derived from JAVA would make the synchronized computing inherently a JAVA technology.);

Further, claim 12 *additionally recites* the limitation that; “The method [This claim is the method claim for the system (apparatus) claim 2 above, and is rejected for the same reasons provided for the claim 2 rejection] of Claim 11, wherein the first and second set of applications are Java language applications.”;

Further, claim 21 *additionally recites* the limitation that; “The system [This claim is the system mean plus function claim for the system (apparatus) claim 2 above, and is rejected for the same reasons provided for the claim 2 rejection] of Claim 20, wherein the generating means and the processing means are Java language applications.”.

6. Claim 3 *additionally recites* the limitation that; “The apparatus of Claim 2, wherein the first application comprises an applet.”. The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing being derived from JAVA would make the synchronized computing inherently a JAVA technology, and further, since JAVA used in connection with Internet WEB services and browser support would clearly encompass the applets software implementation aspects of JAVA at the client browser. Further,

the “application launcher as a plug-in for popular web-browsers” (i.e., paragraph 0172) aspect of synchronized computing supports this limitation);

Further, claim 13 *additionally recites* the limitation that; “The method [This claim is the method claim for the system (apparatus) claim 3 above, and is rejected for the same reasons provided for the claim 3 rejection] of Claim 12, wherein executing the first application further comprises executing a Java applet.”;

Further, claim 22 *additionally recites* the limitation that; “The system [This claim is the system mean plus function claim for the system (apparatus) claim 3 above, and is rejected for the same reasons provided for the claim 3 rejection] of Claim 21, wherein the generating means further comprises an applet.”.

7. Claim 4 *additionally recites* the limitation that; “The apparatus of Claim 3, wherein the, second application comprises a servlet.”. The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing being derived from JAVA would make the synchronized computing inherently a JAVA technology, and further, since JAVA used in connection with Internet WEB services and browser support would clearly encompass the servlet software implementation aspects of JAVA at the server database applications side of the client/server system.).

8. Claim 5 *additionally recites* the limitation that; “The apparatus of Claim 4 further comprising an application server that executes the servlet.”. The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing used in connection with Internet WEB services to support the servlet software implementation aspects of JAVA at the server database applications side clearly teaches of the applications

server as one of several network servers used in the software distribution/book purchase, and associated bank credit card verification aspects of the network application.);

Further, claim 14 *additionally recites* the limitation that, "The method [This claim is the method claim for the system (apparatus) claim 5 above, and is rejected for the same reasons provided for the claim 5 rejection] of Claim 13 further comprising executing the second set of applications on the application server that process the proxy objects from the client computer, wherein the second set of applications comprises servlets.";

Further, claim 23 *additionally recites* the limitation that, "The system [This claim is the system mean plus function claim for the system (apparatus) claim 5 above, and is rejected for the same reasons provided for the claim 5 rejection] of Claim 22, wherein the processing means further comprises a set of servlets.".

9. Claim 6 *additionally recites* the limitation that, "The apparatus of Claim 5 further comprising a database server that contains the data being accessed by the application server wherein the database server and the application server are located in different geographic areas.".

The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing used in connection with Internet WEB services to support the servlet software implementation aspects of JAVA at the server database applications side clearly teaches of the applications server as one of several network servers (i.e., paragraphs 0623-0625, located at different Internet addresses) whereas the specific bank/ vendor (software /book vendor) servers would clearly be at different locations than the bank credit card verification database used in the software distribution/book purchase, and associated bank credit card verification aspects of the network application.);

Further, claim 15 *additionally recites* the limitation that; "The method [This claim is the method claim for the system (apparatus) claim 6 above, and is rejected for the same reasons provided for the claim 6 rejection] of Claim 14 further comprising accessing the database using a 2 database server that contains the data being accessed by the application server wherein the database server and the application server are located in different geographic areas.";

Further, claim 24 *additionally recites* the limitation that; "The system [This claim is the system mean plus function claim for the system (apparatus) claim 6 above, and is rejected for the same reasons provided for the claim 6 rejection] of Claim 23 further comprising means for storing the database that contains the data being accessed by the application server wherein the database server and the application server are located in different geographic areas.".

10. Claim 7 *additionally recites* the limitation that; "The apparatus of Claim 6 further comprising a communications network that permits the client, the application server and the database server to communicate data with each other and wherein the data communications between the client and application server occur using the hypertext transfer protocol (HTTP) that tunnels through the security mechanism." The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing used in connection with Internet WEB services to support VPN tunneling aspects (i.e., paragraphs 0265-0287, 0369) of the network communications security as far as data transfer thru the security mechanisms (i.e., the firewalls, gateways configured with appropriate proxy security, etc), clearly teaches this HTTP aspect of WEB security.);

Further, claim 16 *additionally recites* the limitation that; "The method [This claim is the method claim for the system (apparatus) claim 7 above, and is rejected for the same reasons

provided for the claim 7 rejection] of Claim 15, wherein the communications between the client computer and the application server uses the hypertext transfer protocol (HTTP) that tunnels through the security mechanism.”;

Further, claim 25 *additionally recites* the limitation that; “The system [This claim is the system mean plus function claim for the system (apparatus) claim 7 above, and is rejected for the same reasons provided for the claim 7 rejection] of Claim 24 further comprising means for communicating between the client, the application server and the database server to communicate data with each other and wherein the data communications between the client and application server occur using the hypertext transfer protocol (HTTP) that tunnels through the security mechanism.”.

11. Claim 8 *additionally recites* the limitation that; “The apparatus of Claim 7, wherein the data communications between the client and the application server occur over port 80.”. The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing used in connection with Internet WEB services to support VPN tunneling aspects (i.e., paragraphs 0265-0287, 0369) of the network communications security as far as data transfer thru the security mechanisms (i.e., the firewalls, gateways configured with appropriate proxy security, etc), clearly teaches this HTTP specific port 80 addressing aspect of Internet WEB communications.);

Further, claim 17 *additionally recites* the limitation that; “The method [This claim is the method claim for the system (apparatus) claim 8 above, and is rejected for the same reasons provided for the claim 8 rejection] of Claim 16, wherein the communications between the client and the application server occur over port 80.”;

Further, claim 26 *additionally recites* the limitation that; "The system [This claim is the system mean plus function claim for the system (apparatus) claim 8 above, and is rejected for the same reasons provided for the claim 8 rejection] of Claim 25, wherein the data communications between the client and the application server occur over port 80."

12. Claim 9 *additionally recites* the limitation that; "The apparatus of Claim 8, wherein the one or more database drivers further comprise one or more JDBC drivers." The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas the invocation in the applications of which database access of the client/server configuration examples across the Internet would clearly inherently involve the use of driver based database access (i.e., the JAVA infrastructure will inherently use J2EE aspects inclusive of JDBC drivers and support WEB based services and functions).);

Further, claim 18 *additionally recites* the limitation that; "The method [This claim is the method claim for the system (apparatus) claim 9 above, and is rejected for the same reasons provided for the claim 9 rejection] of Claim 17, wherein the one or more database drivers further 2 comprise one or more JDBC drivers.";

Further, claim 27 *additionally recites* the limitation that; "The system [This claim is the system mean plus function claim for the system (apparatus) claim 9 above, and is rejected for the same reasons provided for the claim 9 rejection] of Claim 26, wherein the one or more database drivers further comprise one or more JDBC drivers."

13. Claim 10 *additionally recites* the limitation that; "The apparatus of Claim 6, wherein the application server further comprises means for batching one or more database requests from the client computer so that the batch of database requests are sent periodically to the database

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server.”. The teachings of Narayan suggest such limitations (i.e., paragraphs 0006, 0020-0021, 0041-0647, whereas synchronized computing used in connection with Internet WEB services to support the servlet software implementation aspects of JAVA at the server database applications side clearly teaches of the applications server as one of several network servers (i.e., paragraphs 0623-0625, located at different Internet addresses) whereas the specific bank/ vendor (software /book vendor) servers would clearly be at different locations than the bank credit card verification database used in the software distribution/book purchase, and associated bank credit card verification aspects of the network application. Further, Internet global name services (i.e., paragraphs 0223-0233), and “multiple applications to simultaneously use the device if such ...” (i.e., paragraphs 0234-0252, 0265-0287, 0580-0584) both utilize shared resources architectures such that the inherent queuing of service requests clearly constitutes “batching one or more database requests”.);

Further, claim 19 *additionally recites* the limitation that; “The method [This claim is the method claim for the system (apparatus) claim 10 above, and is rejected for the same reasons provided for the claim 10 rejection] of Claim 15 further comprises hatching one or more database requests from the client computer at the application server so that the batch of database requests are sent periodically to the database server.”;

Further, claim 28 *additionally recites* the limitation that; “The system [This claim is the system mean plus function claim for the system (apparatus) claim 10 above, and is rejected for the same reasons provided for the claim 10 rejection] of Claim 24, wherein the application server further comprises means for hatching one or more database requests from the client computer so that the batch of database requests are sent periodically to the database server.”.

14. As per claim 29; "A system [This claim is the method embodied software claim for the system (apparatus) claims 1-5,9 above, and is rejected for the same reasons provided for the claims 1-5,9 rejection] for accessing data by a Java applet wherein the data is located behind a security mechanism, the system comprising: a client that executes a Java applet having a series of instructions that includes accessing data from a database, the client further comprising one or more database proxy objects that are generated by the Java applet in response to a database request; an application server that executes a servlet that interact with the database proxy objects and generates one or more objects corresponding to the database proxy objects, the application server further comprising one or more JDBC drivers that are integrated into the objects generated by the servlets wherein the JDBC drivers interface with a database so that the application server requests data from the database; and wherein the applet interacts with the database through the application server so that a security mechanism protecting the client does not interrupt the accessing of the data in the database."

15. As per claim 30; "A system [This claim is the method embodied software claim for the system (apparatus) claims 1,5 above, and is rejected for the same reasons provided for the claims 1,5 rejection] for accessing data located behind a security mechanism, comprising: a client that executes a first application having a series of instructions that includes accessing data from a database, the client further comprising one or more database proxy objects; an application server that executes one or more second applications that interact with the database proxy objects and have one or more corresponding objects, the application server further comprising one or more drivers that interface with a database so that the application server requests data from the database; and wherein the client interacts with the database through the application server so that

a security mechanism protecting the client: does not interrupt the accessing of the data in the database.”.

16. Claim 31 *additionally recites* the limitation that; “The system of Claim 30, wherein the first and second set of applications are Java language applications.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 2 above, and is rejected for the same reasons provided for the claim 2 rejection).

17. Claim 32 *additionally recites* the limitation that; “The system of Claim 31, wherein the first application comprises an applet.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 3 above, and is rejected for the same reasons provided for the claim 3 rejection).

18. Claim 33 *additionally recites* the limitation that; “The system of Claim 31, wherein the second set of applications comprises a set of servlets.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 4 above, and is rejected for the same reasons provided for the claim 4 rejection).

19. Claim 34 *additionally recites* the limitation that; “The system of Claim 33 further comprising a database server that contains the data being accessed by the application server wherein the database server and the application server are located in different geographic areas.”.

The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 6 above, and is rejected for the same reasons provided for the claim 6 rejection).

20. Claim 35 *additionally recites* the limitation that; “The system of Claim 34 further comprising a communications network that permits the client, the application server and the

database server to communicate data with each other and wherein the data communications between the client and application server occur using the hypertext transfer protocol (HTTP) that tunnels through the security mechanism.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 7 above, and is rejected for the same reasons provided for the claim 7 rejection).

21. Claim 36 *additionally recites* the limitation that; “The system of Claim 35, wherein the data communications between the client and the application server occur over port 80.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 8 above, and is rejected for the same reasons provided for the claim 8 rejection).

22. Claim 37 *additionally recites* the limitation that; “The system of Claim 36, wherein the one or more database drivers further comprise one or more JDBC drivers.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 9 above, and is rejected for the same reasons provided for the claim 9 rejection).

23. Claim 38 *additionally recites* the limitation that; “The system of Claim 34, wherein the application server further comprises means for batching one or more database requests from the client computer so that the batch of database requests are sent periodically to the database server.”. The teachings of Narayan suggest such limitations (This claim is the embodied software claim for the system (apparatus) claim 10 above, and is rejected for the same reasons provided for the claim 10 rejection).

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Conclusion

24. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (703) 305-4276. The examiner can normally be reached Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (703) 305-9648. The Fax number for the organization where this application is assigned is 703-872-9306.

Ronald Baum

Patent Examiner


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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